

## CLAIMS

1. A synchronization signal detection apparatus characterized by comprising:

5        synchronization signal detection means for inputting a signal formed by a frame in accordance with a predetermined format to detect a synchronization signal to be inserted into said frame,

         interpolation means for interpolating a synchronization signal generated according to detection timing of said synchronization signal  
10 detected by said synchronization signal detection means as a reproducing synchronization signal when said synchronization signal detection means is unable to detect any synchronization signal within a predetermined detection period,

         judgment means for performing judgment about whether said  
15 synchronization signal continuously detected by said synchronization signal detection means is at normal timing or not under a predetermined condition after a start of the interpolation of said synchronization signal by said interpolation means, and

         resynchronization means for outputting said synchronization  
20 signal detected by said synchronization signal detection means as a reproducing synchronization signal according to a judgment result of said judgment means.

2. The synchronization signal detection apparatus as described in  
25 claim1, characterized in that:

         said judgment means is configured to perform judgment about whether each of said synchronization signal is at normal timing or not, by measuring an interval of detection timing of said synchronization signal continuously detected by said synchronization signal detection means, and  
30 by performing judgment about whether said interval of detection timing coincides with a predetermined interval and a predetermined times or

more in accordance with an input signal format.

3. A synchronization signal detection method characterized by comprising the steps of executing:

- 5 a synchronization signal detection process for inputting a signal formed by a frame in accordance with a predetermined format to detect a synchronization signal to be inserted into the frame,
  - an interpolation process for interpolating a synchronization signal generated according to detection timing of the synchronization signal
  - 10 detected by the synchronization signal detection process as a reproducing synchronization signal when no synchronization signal has been able to be detected within a predetermined detection period by the synchronization signal detection process,
  - a judgment process for performing judgment about whether the
  - 15 synchronization signal continuously detected by the synchronization signal detection process is at normal timing or not under a predetermined condition after a start of the interpolation of the synchronization signal by the interpolation process, and
  - resynchronization process for outputting the synchronization
  - 20 signal detected by the synchronization signal detection process as the reproducing synchronization signal according to a judgment result of the judgment process.